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07-16-91

PTO/SB/05 (08-00)

A. d for use through 10/31/2002. OMB 0651-0032

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**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

Attorney Docket No. 11460-112

First Inventor or Application Identifier Michael E. Mack

Title GAS CLUSTER ION BEAM SIZE DIAGNOSTICS AND WORKPIECE PROCESSING

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Express Mail Label No. EL377528809US

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning design patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)  
Applicant claims small entity status. See 37 CFR 1.27.
2. ☐ Specification [Total Pages 34 ]  
(preferred arrangement set forth below)  
- Descriptive title of the invention  
- Cross References to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Background of the invention  
- Brief Summary of the invention  
- Brief Description of the Drawings ( if filed)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure
3. ☒ Drawing(s) (35 U.S.C.113) [Total Sheets 19 ]
4. ☐ Oath or Declaration (unexecuted) [Total Pages 2 ]  
a. ☐ Newly executed (original or copy)  
b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for a continuation/divisional with Box 17 completed)  
i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
5. ☒ Application Data Sheet. See 37 CFR 1.76

**ADDRESS TO**Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

6. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
7. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)  
a. ☐ Computer Readable Form (CRF)  
b. Specification Sequence Listing on:  
i. ☐ CD-ROM or CD-R (2 copies); or  
ii. ☐ paper  
c. ☐ Statements verifying identity of above copies

**ACCOMPANYING APPLICATIONS PARTS**

8. ☐ Assignment Papers (cover sheet & document(s))
9. ☐ 37 C.F.R. §3.73(b) Statement of Power of Attorney (when there is an assignee)
10. ☐ English Translation Document (if applicable)
11. ☐ Information Disclosure Statement (IDS)/PTO-1449
12. ☐ Preliminary Amendment
13. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
14. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
15. ☒ Other: Check for \$1,140.00 (filing fee/extra claims).

17. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below, and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No: \_\_\_\_ /

Prior application information: Examiner \_\_\_\_

Group / Art Unit:

For **CONTINUATION** or **DIVISIONAL APPS** only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**17. CORRESPONDENCE ADDRESS**☒ Customer Number or Bar Code Label

26486

or ☐ Correspondence address below

(Insert Customer No. or Attach bar code label here)

Name

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type)

Jacob N. Erlich

Registration No. (Attorney/Agent)

24,338

Signature

Date

July 13, 2001

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FEE TRANSMITTAL for FY 2001		Complete if Known		
		Application Number	N/A	
Patent fees are subject to annual revision.		Filing Date	Herewith	
		First Named Inventor	Michael E. Mack	
		Examiner Name	N/A	
		Group / Art Unit	N/A	
TOTAL AMOUNT OF PAYMENT	(\$)	1,140.00	Attorney Docket No.	11460-112

METHOD OF PAYMENT (check one)		FEE CALCULATION (continued)											
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:	3. ADDITIONAL FEES												
Deposit Account Number	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid									
03-2410 (Order No. 11460-112)	105 130	205 65	Surcharge - late filing fee or oath										
Deposit Account Name	127 50	227 25	Surcharge - late provisional filing fee or cover sheet.										
Perkins, Smith & Cohen LLP	139 130	139 130	Non-English specification										
<input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17	147 2,520	147 2,520	For filing a request for reexamination										
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27	112 920*	112 920*	Requesting publication of SIR prior to Examiner action										
2. <input checked="" type="checkbox"/> Payment Enclosed:	113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action										
<input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other	115 110	215 55	Extension for reply within first month										
FEE CALCULATION		116 390	216 195	Extension for reply within second month									
1. BASIC FILING FEE	117 890	217 445	Extension for reply within third month										
Large Entity Fee Code (\$)	118 1,390	218 695	Extension for reply within fourth month										
Small Entity Fee Code (\$)	128 1,890	228 945	Extension for reply within fifth month										
Fee Description	119 310	219 155	Notice of Appeal										
101 710	201 355	Utility filing fee	120 310	220 155	Filing a brief in support of an appeal								
106 320	206 160	Design filing fee	121 270	221 135	Request for oral hearing								
107 490	207 245	Plant filing fee	138 1,510	138 1,510	Petition to institute a public use proceeding								
108 710	208 355	Reissue filing fee	140 110	240 55	Petition to revive - unavoidable								
114 150	214 75	Provisional filing fee	141 1,240	241 620	Petition to revive - unintentional								
SUBTOTAL (1)		142 1,240	242 620	Utility issue fee (or reissue)									
(\$)		143 440	243 220	Design issue fee									
2. EXTRA CLAIM FEES		144 600	244 300	Plant issue fee									
Total Claims	35	-20	=	15	X	Fee from below	18	=	270	Fee Paid			
Independent Claims	5	-3	=	2	X	80	=	160					
Multiple Dependent					X		=	0					
Large Entity Fee Code (\$)	103 18	203 9	Claims in excess of 20	102 80	202 40	Independent claims in excess of 3	104 270	204 135	Multiple dependent claim, if not paid				
Small Entity Fee Code (\$)	109 80	209 40	** Reissue independent claims over original patent	110 18	210 9	** Reissue claims in excess of 20 and over original patent	SUBTOTAL (2)				(\$)	430	
*Reduced by Basic Filing Fee Paid													
SUBTOTAL (3)												(\$)	0
**or number previously paid, if greater; For Reissues, see above													

SUBMITTED BY		Complete (if applicable)			
Name (Print/Type)	Jacob N. Erlich	Registration No. Attorney/Agent	24,338	Telephone	(617) 854-4000
Signature		Date	July 13, 2001		

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Express Mail Label No: EL377528809US

Date of Deposit: July 13, 2001

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**PATENT APPLICATION**

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a U.S. citizen

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INVENTION TITLE: GAS CLUSTER ION BEAM SIZE DIAGNOSTICS AND  
WORKPIECE PROCESSING

ASSIGNEE: Epion Corporation

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To: Commissioner for Patents  
BOX PATENT APPLICATION  
Washington, D.C. 20231

Sir:

Your applicants, named above, hereby requests acceptance of the enclosed regular utility application entitled as stated above pursuant to 35 U.S.C. § 111(a).

11460-112